

REMARKS

In the Office Action mailed December 22, 2003, the Examiner rejected claims 1 to 11. This Response "A" cancels no claims, amends claim 1, and adds new claims 12 to 14. Accordingly, claims 1 to 14 are now pending in this application.

Claims 1 to 5 were rejected under 35 U.S.C. 102(b) as anticipated by Vandehey (US 4,919,414). The Examiner stated that "the processor also records the next signal peak above the threshold" and "the data gathered is to decide treatment options". The Examiner also stated that "this reference would therefore provide for all the features as recited in the claims

Amended independent claim 1 and claims dependent therefrom are allowable because they each require "(b) detecting the next following ECG signal peak, and (c) providing an output signal upon such detection, wherein said output signal identifies the instant to apply the defibrillation voltage to the patient". As discussed the present specification, one of the objects of the present invention is to determine the precise moment or instant to apply a defibrillation voltage (shock) to a patient and not simply to decide whether a patient should be defibrillated or not. Claim one has been amended accordingly. To this end, the claimed apparatus looks for and identifies "a region of the ECG signal where such signal passes from a first threshold to a second threshold at least equal in magnitude thereto while the gradient of such signal remains within certain limits." Having identified such a region, the next following ECG signal peak is detected, and an output signal is provided in response to such detection. It is this output signal which determines the instant of applying the defibrillation voltage. The system therefore operates in real time to detect the defibrillation instant. Clearly, to determine the correct instant for defibrillation after the event would wholly fail to meet the object of the invention.

Neither Vandehey nor any other prior art of record reasonably discloses or suggests the present invention as now claimed by amended claim 1. Vandehey simply looks to see whether the patient is susceptible for defibrillation, not when the individual shocks should be given. Vandehey looks for maxima and minima but does not at any point determine the gradient between them. Nowhere in Vandehey is there any indication or suggestion that the gradient

between the maxima and minima is of any interest in determining the instant of the defibrillation. This contrasts strongly with the present invention as now claimed where the gradient is a primary factor in whether a shock is to be given or not. Further more, since Vandehey works by a signal storage (see e.g., the abstract and claims) and post –processing, it is quite clearly incapable of operation in real time in order to indicate the instant that a shock should be given. Reconsideration and withdrawal of the rejection is requested.

Claims 6 to 11 were rejected under 35 U.S.C. 103(a) as unpatentable over Vandehey (US 4,919,144) in view of Cameron et al. (5,607,454).

As discussed above, amended independent claim 1 and claims dependent therefrom are allowable over Vandehey. Cameron fails to provide the insufficiencies of Vandehey. Accordingly, claims 6 to 11 are allowable as depending from allowable claim 1 and independently allowable for novel and nonobvious matter contained therein. Reconsideration and withdrawal of the rejection is requested.

New claims 12 to 14 have been added to further define the present invention.

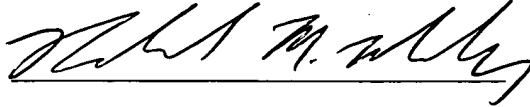
In light of the foregoing, it is respectfully submitted that the present application is in a condition for allowance and notice to that effect is hereby requested. If it is found that that the present amendment does not place the application in a condition for allowance, applicant's undersigned attorney requests that the examiner initiate a telephone interview to expedite prosecution of the application.

If there are any fees resulting from this communication, please charge same to our Deposit Account No. 16-2326.

April 14, 2004

Respectfully submitted,

PORTER, WRIGHT, MORRIS & ARTHUR LLP

A handwritten signature in dark ink, appearing to read "Richard M. Mescher", written over a horizontal line.

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